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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/664,334

09/17/2003

Scott Chiu

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BUCKLEY, MASCHOFF & TALWALKAR LLC

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NEW CANAAN, CT 06840

EXAMINER

JAMAL, ALEXANDER

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/664,334	Applicant(s) CHIU ET AL.	
	Examiner Alexander Jamal	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Transferring a Clock Signal From a System Side Circuit to a Line Side Circuit in a Telecommunications Device.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1,2,5-10,13-20,23-26** rejected under 35 U.S.C. 102(e) as being anticipated by Krone et al (7003023).

As per **claim 1**, Krone discloses (Fig. 2), line side 226 and system side 225. They are coupled via isolation barrier 209,210. The system side has first and second clock drivers 214. Krone discloses that the clock signals may implement a differential signal (Col 8 lines 1-6) using complementary signals. Examiner notes (Col 13 line 64 to Col 14 lines 15-35) and Fig. 6b, which show the use of the complementary signals acting as a

differential signal. In a differential signal comprised of two complementary signals as implemented by Krone, the signals would add up to a constant voltage value, with one version being the inverted version of the other.

As per **claim 9**, it is rejected as per the claim 1 rejection. Additionally (Col 8 lines 25-40) disclose the use of integrated circuits to implement the function shown in Fig. 2, including driver 214 (second IC) and block 216 (first IC).

As per **claims 15,19**, it is rejected as per the claim 9 rejection.

As per **claims 2,10,17,20**, complementary signals comprising a differential signal implemented by Krone would have 1 wave (180 degrees out of phase) inverted from the other one.

As per **claims 5,18,23**, capacitors 209,210 couple the clock signals.

As per **claims 6,13,24**, the line side circuit (Fig. 2) comprises diode bridge 640 coupled to power supply 220 (Col 14 lines 15-35). This is further shown in either Fig. 6a or 6b with the diodes implemented with transistors.

As per **claims 7,25**, the power supply comprises third capacitor 645.

As per **claims 8,26**, the line side circuit monitors the telephone line (Col 21 lines 10-25) via Node A 134.

As per **claims 14,16**, they are rejected as per the claim 8 and 9 rejections.

Art Unit: 2614

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


4. **Claims 3,4,11,12,21,22**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Krone et al (7003023) as applied to claims 1,2,9,10,19,20.

As per **claims 3,4,11,12,21,22**, Krone discloses transmitting complementary, inverted (out of phase) clock signals to create a differential signal. However, Krone does not specify the duty cycle of the clock signals.

Complementary clock signals forming a differential signals would be inverted from each other, and as such, the 'on' duty cycle of one would track the 'off' duty cycle of the other.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 571-272-7498. The examiner can normally be reached on M-F 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 571-272-7499. The fax phone numbers for the organization where this application or proceeding is assigned are **571-273-8300** for regular communications and **571-273-8300** for After Final communications.


Examiner Alexander Jamal
June 17, 2007